



RIDOT TMC Unplanned Incident Statistics and Performance Measures June 2008

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is part of our ongoing Performance Measurement effort. Through this effort, we are quantifying the benefits of the ITS program in our state, and are also able to monitor improvements in the efficiency and effectiveness with which we manage roadway incidents. By making these statistics available to you on a monthly basis, we hope that you can learn more about the program and understand the benefit of the service we provide to the Rhode Island motoring.

These monthly reports represent statistics for unplanned incidents on Rhode Island's roadways. The types of incidents included in the report include disabled vehicles, debris on the roadway, emergency roadwork, and vehicle accidents, including jack-knifed trucks and vehicle spinouts. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (<http://www.tmc.state.ri.us>), including construction and incident information.

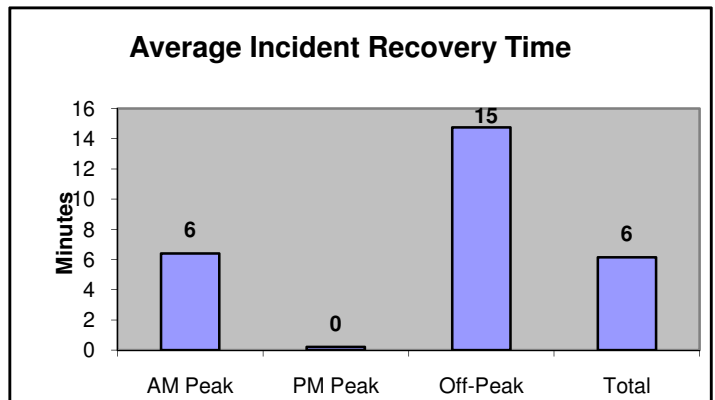
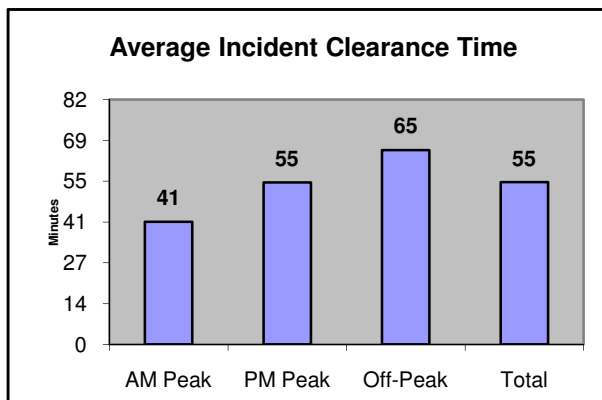
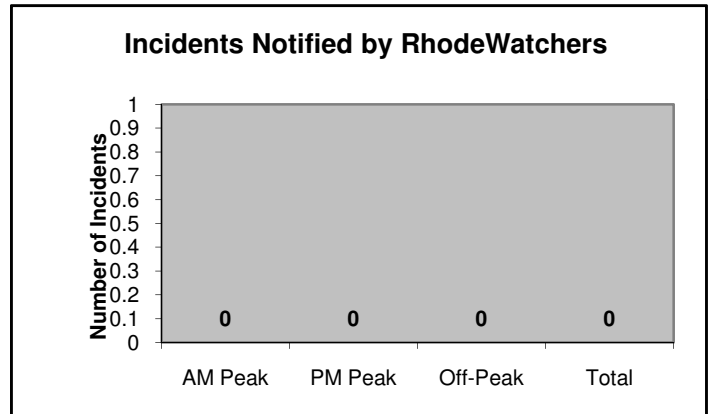
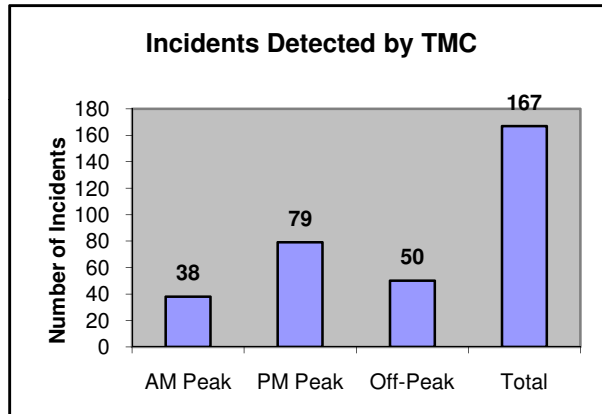
RIDOT TMC Unplanned Incident Statistics and Performance Measures Report

1. Peak Period Incident Statistics*

	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	43	80	54	177
Avg. Incident Duration (hr:min)	48	55	80	61
Avg. Incident Clearance Time (hr:min)	41	55	65	55
Avg. Incident Recovery Time (hr:min)	6	0	15	6
# Detected by TMC Operators (CCVE)	24	35	30	89
# Detected by TMC, State Police	14	44	20	78
# Notified by RhodeWatchers	0	0	0	0
# of Messages Posted VMS	1	6	6	13
# of Messages Posted DMS	21	45	21	87
# of Messages Posted HAR	13	14	20	47
# of Messages posted Web	36	73	43	152
Avg. Delay Cost**	\$201,564	\$231,434	\$338,870	\$256,954
Total Delay Cost	\$8,667,266	\$18,514,701	\$18,298,975	\$45,480,942

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

** Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.



Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways

Incident Clearance Time is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

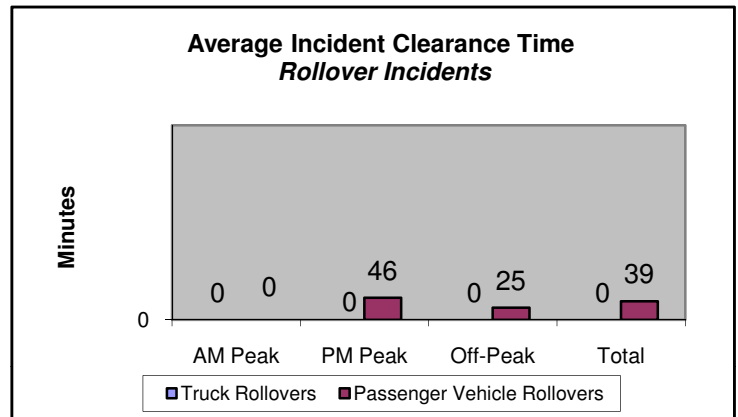
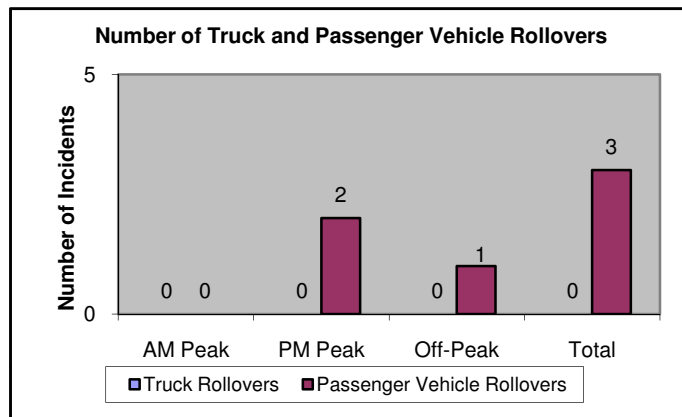
Incident Recovery Time is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.



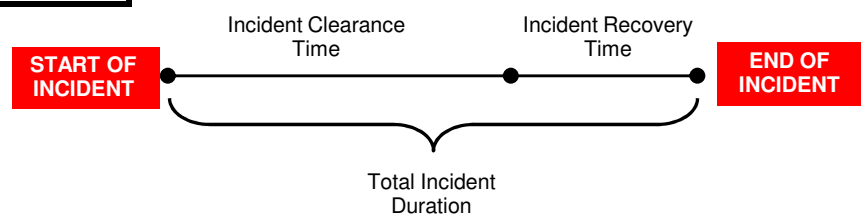
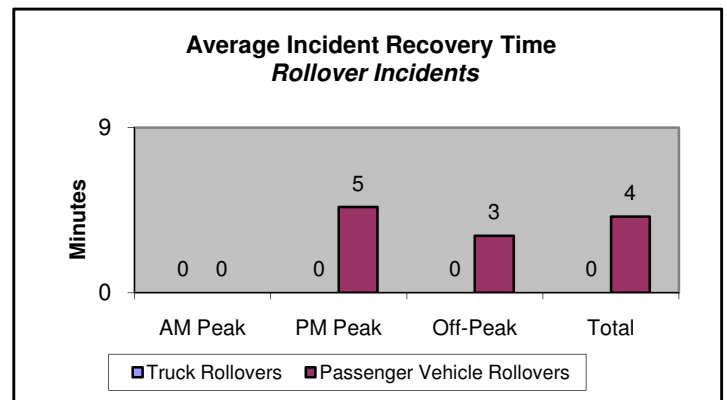
2. Rollover Incident Statistics*

VEHICLES	Trucks				Automobiles			
	AM Peak	PM Peak	Off-Peak	Total	AM Peak	PM Peak	Off-Peak	Total
No. of Rollovers	0	0	0	0	0	2	1	3
Avg. Incident Duration (min)	0	0	0	0	0	50	28	43
Avg. Incident Clearance Time (min)	0	0	0	0	0	46	25	39
Avg. Incident Recovery Time (min)	0	0	0	0	0	5	3	4

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday



Roadway	Exit Number	Number Of Rollovers
Interstate 295 Northbound	10	1
Interstate 95 Southbound	20	1
Interstate 95 Southbound	9	1
TOTAL		3



3. Incidents by Severity Level

Severity Level*	No. of Incidents
Severity 0	57
Severity 1	39
Severity 2	17
Severity 3	11
Severity 4	11
Unknown	42
Total	177

Number of Incidents with a Secondary

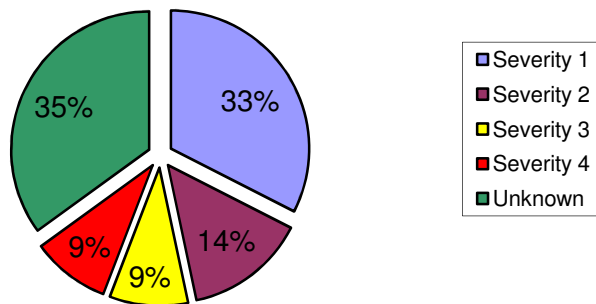
Incident:

Percentage of Incidents with a Secondary

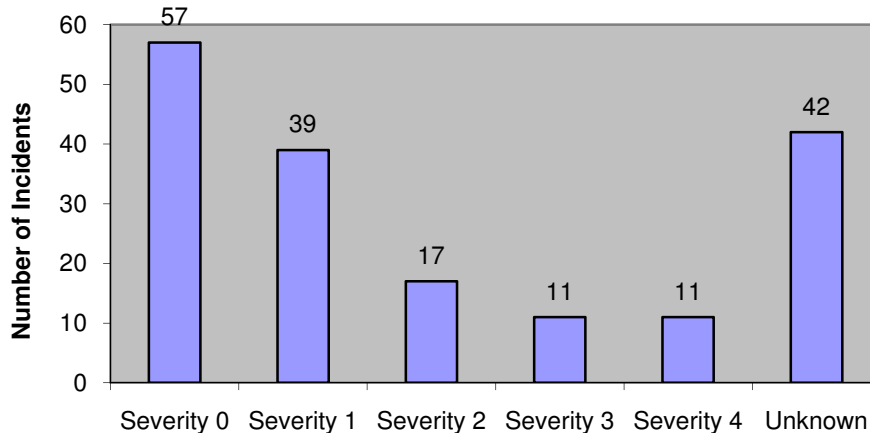
Incident:

Note: A "secondary" incident is one that is the result of an earlier incident.

Percent of Incidents by Severity Level



Number of Incidents by Severity Level



*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR Hazmat w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed

OR Structural damage w/ 1/3, 2/3+ lanes closed

Unknown: Incidents without a recorded severity level

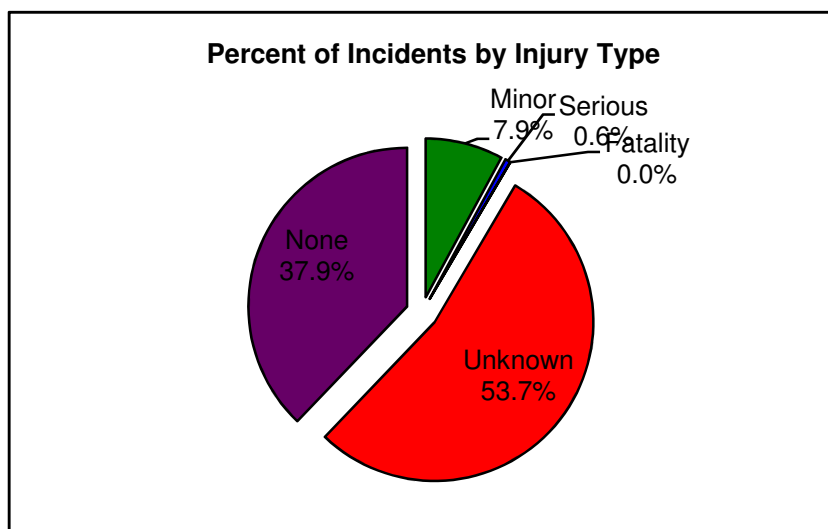
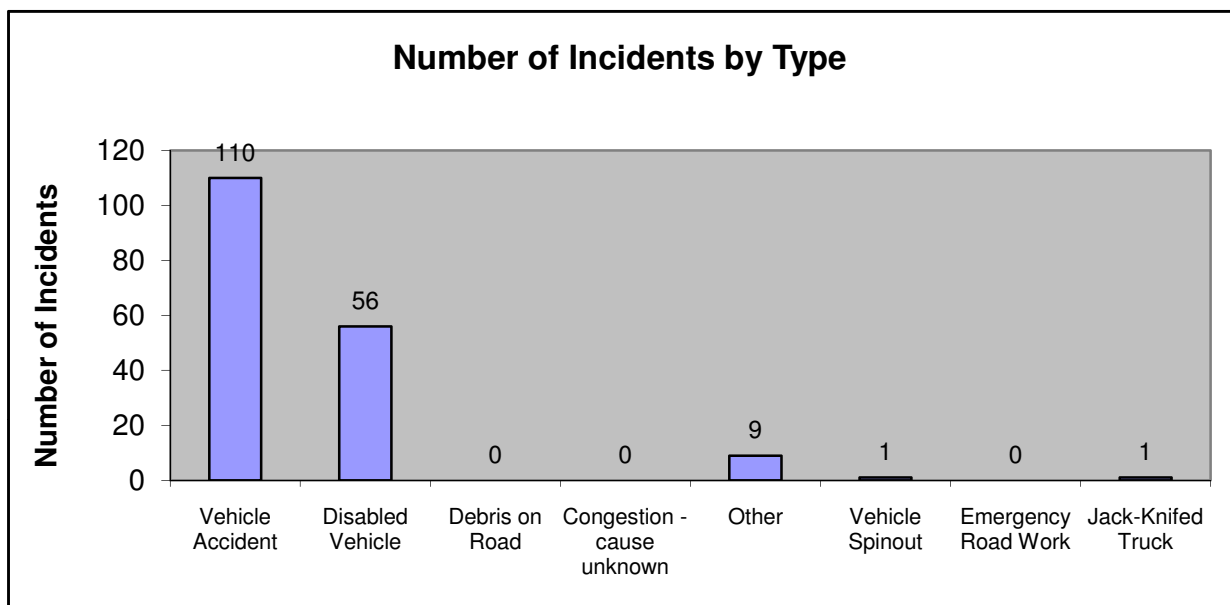
Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	110
Disabled Vehicle	56
Debris on Road	0
Congestion - cause unknown	0
Other	9
Vehicle Spinout	1
Emergency Road Work	0
Jack-Knifed Truck	1
<i>Total Number of Incidents</i>	<i>177</i>

5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	14
Serious	1
Fatality	0
Unknown	95
None	67
<i>Total</i>	<i>177</i>



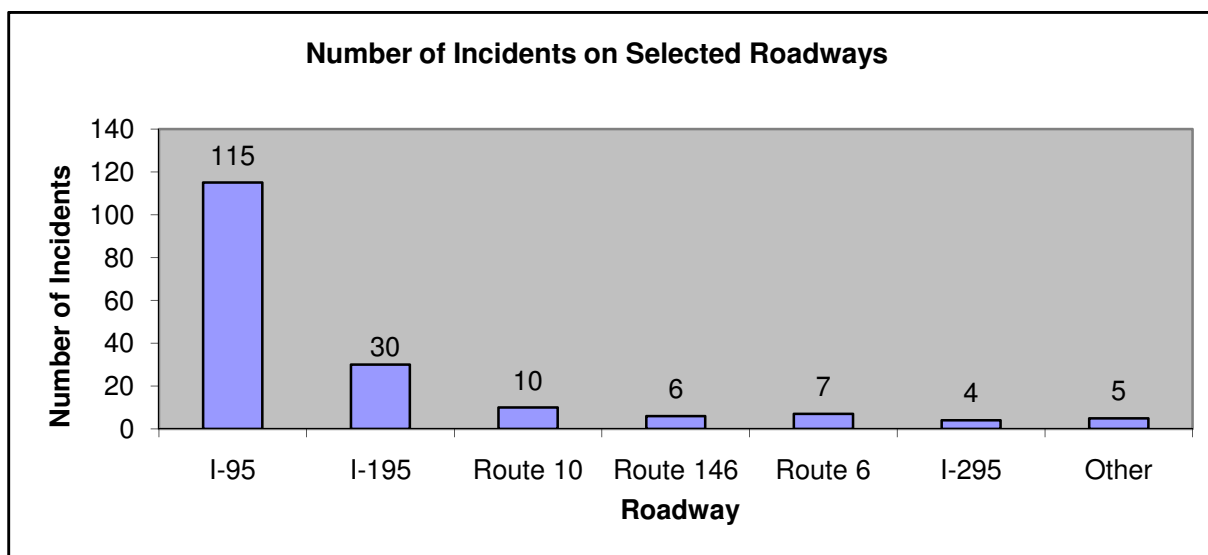
6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	142
Wet	33
Icy	0
Snow-Covered	0
Flooded	2
Other	0
<i>Total</i>	<i>177</i>
Precipitation	
None	150
Light-moderate rain falling	24
Heavy rain falling	3
Light-moderate sleet falling	0
Heavy Sleet falling	0
Light-moderate snow falling	0
Heavy snow falling	0
<i>Total</i>	<i>177</i>
Wind	
Calm to Moderate	175
Moderate to Strong	0
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	1
N/A	1
<i>Total</i>	<i>177</i>
Visibility	
Clear	157
Light fog	5
Dense fog	0
Reduced- rain	14
Reduced-snow	0
Poor-heavy rain/sleet	0
Poor-heavy snow	0
Reduced-smoke	0
Other	0
N/A	1
<i>Total</i>	<i>177</i>

7. Incidents Detected by Primary Notifier on Selected Roadways

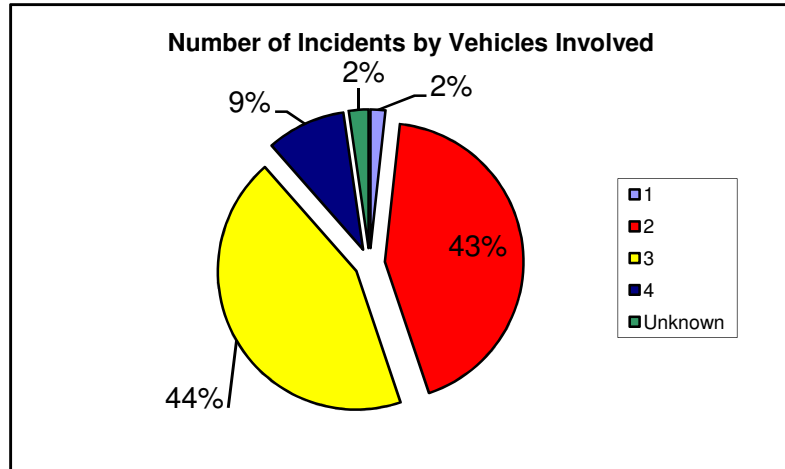
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	14
	State Police Scanner	5
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	2
	Traffic.com	0
	TMC State Police	8
	Transcom	0
	Other	1
	Total	30
I-95	TMC Operator	63
	State Police Scanner	23
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	1
	Traffic.com	0
	TMC State Police	24
	Transcom	0
	Other	4
	Total	115
I-295	TMC Operator	1
	State Police Scanner	2
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	1
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	0
	Total	4

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	5
	State Police Scanner	1
	Local Fire Department	1
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	3
	Transcom	0
	Other	0
	Total	10
Route 146	TMC Operator	1
	State Police Scanner	4
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	1
	Transcom	0
	Other	0
	Total	6
Route 6	TMC Operator	4
	State Police Scanner	3
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	0
	Total	7



8. Incidents by Number of Vehicles Involved

No. of Vehicles Involved	No. of Incidents
1	3
2	75
3	76
4	16
5	2
6	0
7	1
8	0
9	0
10+	0
Unknown	4
Total Incidents	177

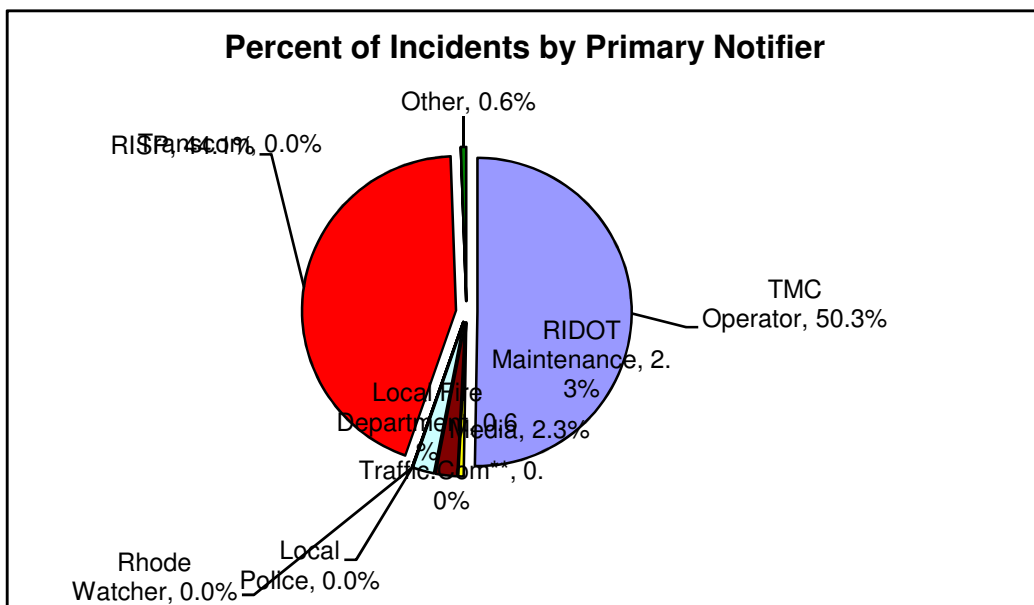


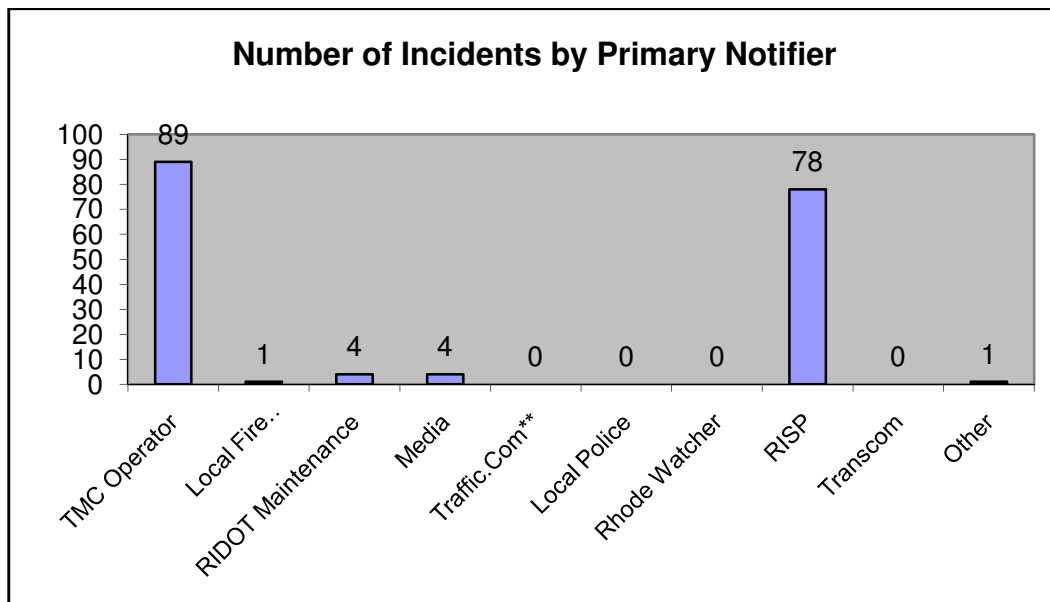
9. Incident Notification

Primary Notifier*	No. of Incidents
TMC Operator	89
Local Fire Department	1
RIDOT Maintenance	4
Media	4
Traffic.Com**	0
Local Police	0
Rhode Watcher	0
RISP	78
Transcom	0
Other	1
Total	177

*First notifier of the incident to TMC

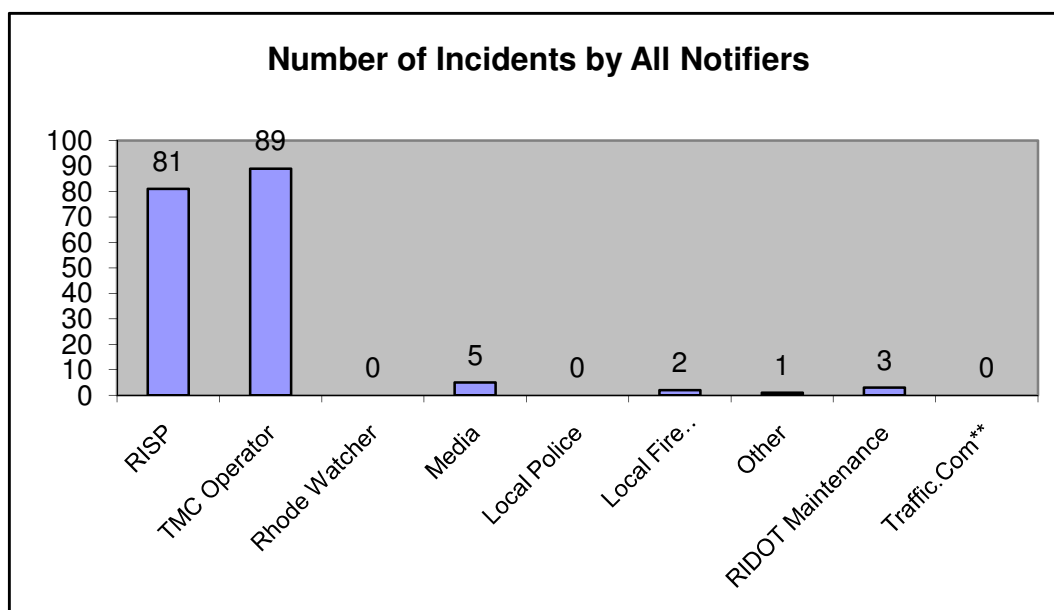
**Formerly Mobility Technologies





Notifier	No. of Incidents
RISP	81
TMC Operator	89
Rhode Watcher	0
Media	5
Local Police	0
Local Fire Department	2
Other	1
RIDOT Maintenance	3
Traffic.Com**	0
Transcom	0

Note: Primary notifier indicates the first notifier of the incident to the TMC. Additional notifiers are also logged, and are represented in the statistics for "all notifiers".



10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	136	76.84%
Tow	38	21.47%
Local Fire Department	43	24.29%
EMS	35	19.77%
Local Police	18	10.17%
Service Patrol	7	3.95%
Mass Highway	1	0.56%
DOT	4	2.26%
Hazmat	0	0.00%
DEM	1	0.56%
Connecticut DOT	0	0.00%
Construction	0	0.00%
Coast Guard	0	0.00%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	0	0.00%

TMC Equipment used	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	100
# of VMS Messages	13
# of DMS Messages	87
# of HAR Messages	47
# of Web Messages	#VALUE!

Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.

